

Figure S1. CUDC-907 treatment inhibits cells from migrating out of cultured keloid tissue explants. Representative images of tissue explants (black shadows in the upper right corners) cultured without or with different concentrations of the CUDC-907 at various time points. Magnification, x40; scale bar=250 μ m. D, day.

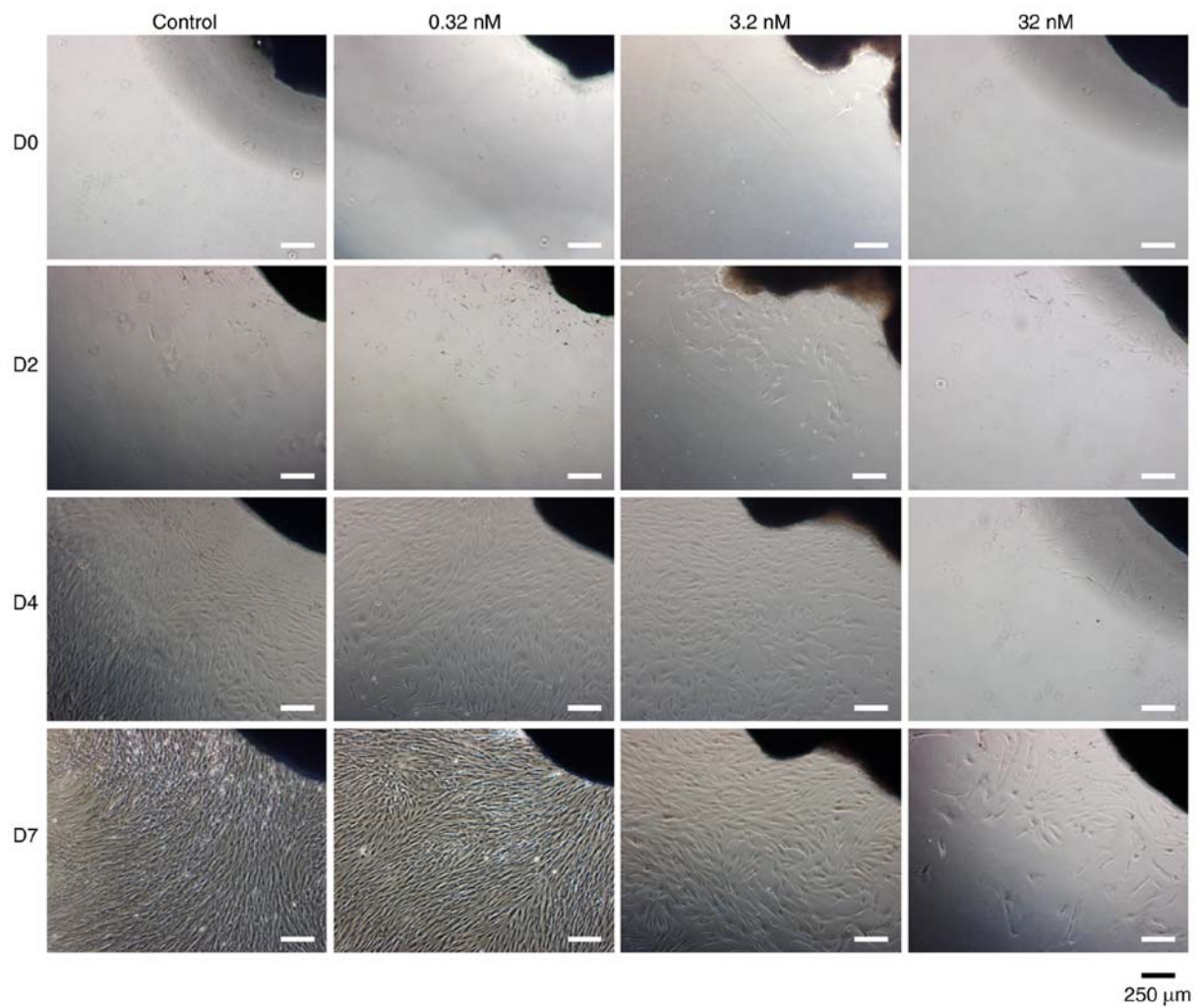


Table SI. Patients and anatomic locations of keloid or foreskin tissue samples.

Sample no.	Sex	Ethnic background	Age	Site(s) of specimen
1	Male	Asian	16	Shoulder
2	Male	Asian	20	Arms
3	Male	Asian	34	Chest
4	Male	Asian	23	Neck
5	Female	Asian	20	Chest
6	Female	Asian	29	Chest
7	Female	Asian	11	Abdomen
8	Male	Asian	26	Chest
9	Female	Asian	41	Chest
10	Female	Asian	56	Shoulder
11	Female	Asian	72	Ear lobe
12	Female	Asian	28	Chest
13	Male	Asian	29	Chest
14	Female	Asian	24	Chest
15	Female	Asian	54	Chest
16	Male	Asian	64	Abdomen
17	Female	Asian	51	Chest
18	Female	Asian	18	Shoulder
19	Female	Asian	46	Chest
20	Female	Asian	40	Hip
21	Female	Asian	29	Chest
22	Female	Asian	23	Ear lobe
23	Female	Asian	57	Shoulder
24	Female	Asian	27	Perineum
25	Male	Asian	32	Chest
26	Male	Asian	58	Abdomen
27	Female	Asian	33	Beck
28	Male	Asian	8	Beck
29	Male	Asian	7	Chest
30	Female	Asian	23	Perineum
31	Female	Asian	13	Chest
32	Male	Asian	32	Shoulder
33	Male	Asian	36	Face
34	Male	Asian	44	Chest
35	Male	Asian	37	Chest
36	Male	Asian	23	Chest
37	Male	Asian	30	Chest
38	Male	Asian	26	Chest
39	Female	Asian	27	Shoulder
40	Female	Asian	44	Ear lobe
41	Male	Asian	27	Chest
42	Female	Asian	37	Shoulder
43	Female	Asian	42	Chest
44	Male	Asian	60	Shoulder
45	Female	Asian	30	Shoulder
46	Male	Asian	30	Chest
47	Female	Asian	23	Chest
48	Male	Asian	10	Foreskin
49	Male	Asian	32	Foreskin
50	Male	Asian	28	Foreskin
51	Male	Asian	8	Foreskin

Table SII. Primers used in the reverse transcription quantitative polymerase chain reaction analysis.

Gene	Primer sequence (5'-3')	Annealing temperature (°C)	Product size (bp)
Collagen I			
Sense	GGCGGCCAGGGCTCCGACCC	58	347
Antisense	AATTCCTGGTCTGGGGCACC		
Collagen III			
Sense	TGGTGTGGAGCCGCTGCCA	58	373
Antisense	CTCAGCACTAGAATCTGTCC		
P21			
Sense	TCCAGCGACCTTCCTCATCCAC	58	108
Antisense	TCCATAGCCTCTACTGCCACCATC		
P53			
Sense	TAACAGTTCCTGCATGGGCGGC	58	121
Antisense	AGGACAGGCACAAACACGCAC		
Cyclin B			
Sense	CCTCCGGTGTCTGCTTCTC	58	121
Antisense	CCTGCCATGTTGATCTTCGC		
TGF- β 1			
Sense	AAGGACCTCGGCTGGAAGTG	58	136
Antisense	CCGGGTATGCTGGTTGTA		
MMP1			
Sense	GGAGCTGTAGATGTCCTTGGGGT	58	139
Antisense	GCCACAACCTGCCAAATGGGCTT		
MMP2			
Sense	CAAAAACAAGAAGACATACATCTT	58	232
Antisense	GCTTCCAAACTTCACGCTC		
MMP3			
Sense	AGGACAAAGCAGGATCACAGTTG	58	68
Antisense	CCTGGTACCCACGGAACCT		
MMP13			
Sense	AGTGGTGGTGATGAAGATGATTTG	58	144
Antisense	CATTTCTCGGAGCCTCTCAGTC		
TIMP1			
Sense	TGACATCCGGTTCGTCTACA	58	102
Antisense	TGCAGTTTTCCAGCAATGAG		
GAPDH			
Sense	TCACCATCTTCCAGGAGCG	58	572
Antisense	CTGCTTACCACCTTCTTGA		

p21, cyclin-dependent kinase inhibitor 1; TGF- β 1, transforming growth factor β 1; MMP, matrix metalloproteinase; TIMP1, tissue inhibitor of metalloproteinase 1.

Table III. Antibodies used in western blot analysis and immunohistochemical staining.

Targets	Supplier	Catalog number	Dilution	Species reaction	Usage
Acetyl-Histone 3	Abcam	ab8898	1:1,000	Rabbit anti-human	WB
P21	Cell Signaling Technologies, Inc.	2946	1:2,000	Mouse anti-human	WB
P53	Cell Signaling Technologies, Inc.	2524	1:1,000	Mouse anti-human	WB
Type I collagen	Abcam	ab90395	1:1,000	Mouse anti-human	WB
Type III collagen	Abcam	ab7778	1:5000	Rabbit anti-human	WB
Akt	Abbkine Scientific Co., Ltd.	Abm40272	1:1,000	Mouse anti-human	WB
p-Akt	Abbkine Scientific Co., Ltd.	Abm40275	1:1,000	Mouse anti-human	WB
Erk	Cell Signaling Technologies, Inc.	4695	1:1,000	Rabbit anti-human	WB
p-Erk	Cell Signaling Technologies, Inc.	4370	1:2,000	Rabbit anti-human	WB
mTOR	Cell Signaling Technologies, Inc.	2983	1:1,000	Rabbit anti-human	WB
p-mTOR	Cell Signaling Technologies, Inc.	2971	1:1,000	Rabbit anti-human	WB
Smad 2/3	Abcam	ab202445	1:1,000	Rabbit anti-human	WB
p-Smad 2/3	Abcam	ab63399	1:1,000	Rabbit anti-human	WB
Cyclin B	Abcam	ab32053	1:50,000	Rabbit anti-human	WB
β -actin	Abbkine Scientific Co., Ltd.	A01010	1:10,000	Mouse anti-human	WB
HRP-conjugated secondary antibody	Abbkine Scientific Co., Ltd.	A21010; A21020	1:20,000	Goat anti-mouse/rabbit	WB
HDAC2	Abcam	ab32117	1:100	Rabbit anti-human	IHC
Type I Collagen	Wuhan Servicebio Technology Co., Ltd.	GB13022	1:500	Rabbit anti-human	IHC
Type III Collagen	Wuhan Servicebio Technology Co., Ltd.	GB13023	1:300	Rabbit anti-human	IHC
CD31	Wuhan Servicebio Technology Co., Ltd.	GB13063	1:300	Goat anti-human	IHC
CD34	Wuhan Servicebio Technology Co., Ltd.	GB13013	1:1,000	Goat anti-human	IHC
p-mTOR	Abcam	ab109268	1:100	Rabbit anti-human	IHC
mTOR	Abcam	ab2732	1:100	Rabbit anti-human	IHC
Akt	Proteintech Group, Inc.	60203-2-Ig	1:50	Mouse anti-human	IHC
p-Akt	Proteintech Group, Inc.	66444-1-Ig	1:100	Mouse anti-human	IHC
HRP-conjugated secondary antibody	Servicebio	GB23204	1:200	Rabbit anti-goat	IHC

WB, western blot analysis; IHC, immunohistochemical analysis; HPR, horseradish peroxidase; p21, cyclin-dependent kinase inhibitor 1; p, phosphorylated; HDAC2, Histone deacetylases 2; CD31, platelet endothelial cell adhesion molecule; CD34, hematopoietic progenitor cell antigen CD34.